

1. (Amended) A gas storage and production system, comprising:

a gas storage formation, wherein gas is stored within pores of formation $\operatorname{rock}_{;_{\ell},\ell,\ell}$

a production wellbore extending into the formation and withdrawing gas from the formation;

a storage wellbore extending into the formation and injecting gas into the formation; and

the production and storage wellbores intersecting at a wellbore junction.